

REMARKS

Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested. Claim 10 has been added. Claims 1-10 are now pending, with claims 1, 8, 9 and 10 being independent. Support for new claim 10 may be found on pages 31-32 of Applicants' Specification.

DRAWINGS

Applicants acknowledge the Examiner's acceptance of the drawings filed April 20, 2004.

CLAIM OBJECTIONS

Applicants have amended the claims taking into account the Examiner's objection to the claims.

REJECTIONS UNDER 35 U.S.C. § 112

The Examiner rejects claims 1-9 under 35 U.S.C. § 112, 2nd paragraph as being indefinite. Applicants have amended claim 1, 8 and 9 taking into account the Examiner's comments. Withdrawal of these rejections is requested.

CLAIM REJECTIONS UNDER 35 U.S.C. § 102

Claims 1-9 stand rejected under 35 U.S.C. §102(e) as anticipated by U.S. Patent No. 6,424,879 ("Chilese"). This rejection is respectfully traversed.

Chilese fails to anticipate claim 1 because Chilese fails to teach or suggest "determining a two-dimensional critical dimension (CD) distribution associated with said pattern printed on said workpiece," and "generating a two-dimensional compensation file to equalize variations in said two-dimensional CD distribution," as required by claim 1. Therefore, Chilese cannot anticipate claim 1 because Chilese fails to teach or suggest all features of claim 1. *Verdegaal Bros. v. Union Oil Co. of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987); M.P.E.P. § 2131.

Chilese is directed to distortion correction caused by bulk heating of a substrate. Col. 1, ll. 15-17. Pattern writing data is used to manipulate one or more pre-computed or pre-calculated distortion maps from a finite element (FE) model, which simulate or model thermal responses or thermal distortion of a substrate during writing. *Id.* at 47-50. Each distortion map describes expected distortions of the substrate caused by bulk substrate heating resulting from exposure to an electron beam. *Id.* at 65-67. A computer control system controls the electron beam patterning machine using distortion maps in order to adjust for expected distortions resulting from heating of the substrate. *Id.* at col. 2, ll. 1-3.

Chilese, however, is silent with regard to any determination or prediction of a two-dimensional CD distribution associated with a pattern printed on a work piece or any generation of a two-dimensional compensation file for equalizing variations in the CD distribution. In fact, Chilese fails to make any mention of CD or CD compensation at all, let alone, determining a two dimensional CD distribution, as required by claim 1. By contrast, Chilese discusses only correction for errors and distortion caused by heat generated by the electron beam. Therefore, Chilese fails to anticipate claim 1 because Chilese fails to teach or suggest "determining a two-dimensional critical dimension (CD) distribution associated with said pattern printed on said workpiece," and "generating a two-dimensional compensation file to equalize variations in said two-dimensional CD distribution," as required by claim 1.

Claims 8 and 9 also distinguish over Chilese for reasons somewhat similar to those set forth above with regard to claim 1. Dependent claims 2-7 are allowable for at least reasons discussed above with regard to claim 1.

NEW CLAIMS

Applicants have added new independent claim 10, which is also believed to be allowable over Chilese. Although somewhat similar arguments to those set forth above with regard to

claims 1, 8 or 9 may apply, new claim 10 should be interpreted solely by the limitations presented therein. Accordingly, allowance of new claim 10 is requested.

CONCLUSION

Accordingly, in view of the above amendments and remarks, reconsideration of the objections and rejections and allowance of each of claims 1-10 in connection with the present application is earnestly solicited.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a two (2) month extension of time for filing a reply to the outstanding Office Action and submit the required \$450 extension fee herewith.

Should there be any outstanding matters that need to be resolved in the present application; the Examiner is respectfully requested to contact John A. Castellano at the telephone number of the undersigned below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

HARNES, DICKEY, & PIERCE, P.L.C.

By

John A. Castellano, Reg. No. 35,094

P.O. Box 8910
Reston, Virginia 20195
(703) 668-8000

JAC/AMW:ame